



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/585,870	06/01/2000	Tetsuo Maeda	SONY-T0618	4714
22850	7590	03/17/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			DAVIS, DAVID DONALD	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/585,870	MAEDA, TETSUO	
	<b>Examiner</b>	<b>Art Unit</b>	
	David D. Davis	2652	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 November 2005.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-37 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      Paper No(s)/Mail Date. \_\_\_\_\_.  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)      5) Notice of Informal Patent Application (PTO-152)  
 Paper No(s)/Mail Date \_\_\_\_\_.      6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Pre-Appeal Conference Request, filed November 14, 2005, with respect to the rejection(s) of claim(s) 1-37 under Tsai (US 5,982,735) in view of Ishimatsu et al (US 5,956,314) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tsai (US 5,982,735) in view of Ishimatsu et al (US 5,956,314).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (US 5,982,735) in view of Ishimatsu et al (US 5,956,314). Tsai discloses a disc drive for driving a disc shaped recording medium. Figure 1 of Tsai shows the drive includes base 10 made of a single flat plate that is rectangular. Figure 1 also shows disc rotation driving mechanism 11 disposed on the base for rotating a disc shaped recording medium. Figure 1 of Tsai additionally shows recording and/or reading mechanism 20 disposed on the base for recording data on and/or reading data from the medium. Figure 1 of Tsai further shows guide mechanism 30/40 disposed on the base for movably supporting mechanism 20 between inner and outer circumferences of the medium,

Figures 1 and 2 of Tsai show a feeding mechanism 14-17 disposed on base 10. Four receiving portions for base 10 are disposed symmetrically on base 10 with respect to a center line of the base along the direction of movement of the recording and/or reproducing mechanism 20. Figures 1 and 2 also show four supporting mechanisms disposed in the four received portions. At least one of the four supporting mechanisms includes a support piece 18.

Figure 2 of Tsai also shows mechanism 11, 20, and the feeding mechanism 14-17 located on base 10 such that a center of gravity of base 10 lies along the center line.

*Note: with respect to the reference plane of claim 6, for example, it has not been defined. Therefore, a reference plane at an angle through base 10 meets the claimed limitations.*

Tsai is silent as to base 10, which is a single plate, being made of metal with thickness between 1.4 mm and 1.8 mm. Tsai is also silent as to a pivotal support member moving towards and away from a tray. Tsai is additionally silent as to an adjusting piece to adjust an elasticity of the support piece.

Official notice is taken of the fact that single metal plates and pivotable support members in disk drives are notoriously old and well known in the art.

Ishimatsu et al shows in figures 3 and 11 support piece 102 and an adjusting piece, including spring 105, to adjust an elasticity of the support piece.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to form, which is well within the purview of a skilled artisan and absent an unobvious result, the single plate of Tsai with metal as suggested in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been

motivated to form a single plate from metal because it can be melted or fused, hammered into thin sheets while maintaining strength.

It also would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the drive of Tsai with a pivotable support as suggested in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a pivotable support so as to move the base, which carries the head, disk and turntable, to and from the tray thereby allowing the disk to be chucked and ejecting from the disk drive.

It additionally would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the supporting post of Tsai with an adjusting piece as taught by Ishimatsu et al. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a supporting post with an adjusting piece, which is well within the purview of a skilled artisan and absent an unobvious result, so as to adjust an elasticity of the support piece.

### *Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

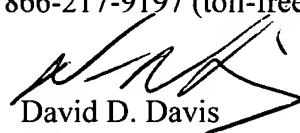
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is 571-272-7572. The examiner can normally be reached on Monday thru Friday between 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David D. Davis  
Primary Examiner  
Art Unit 2652

ddd